

$(\Delta Y/Y) / (\Delta Y/Y)_u$

HAULAB-Y sensitivity
normalized to $(\Delta Y/Y)_u$

$$S_r/S_{ru} = (\Delta Y/Y) / (\Delta Y/Y)_u$$

$$L^* = s(Y/Y_u)^n - d \quad (Y_n=100, Y_u=39, s=137,2, n=0,31, d=52,8) \quad [1a]$$

$$L^* = r(Y/Y_u)^n - d \quad (r = s(Y_u/Y_n)^n = 80,63, L^*_u = r - d = 27,7) \quad [1b]$$

6

4

2

0

Y_curve, ij=15, Yuij=39, L*uij=50

k=99, Ykij=100, L*kij=85,0, $(\Delta Y/Y) / (\Delta Y/Y)_u = 0,74$

k=39, Ykij=40, L*kij=51,8, $(\Delta Y/Y) / (\Delta Y/Y)_u = 0,99$

k=1, Ykij=2, L*kij=-9,4, $(\Delta Y/Y) / (\Delta Y/Y)_u = 2,52$

k=0, Ykij=1, L*kij=-17,2, $(\Delta Y/Y) / (\Delta Y/Y)_u = 3,12$

$\varphi=90^\circ$

$L_{aw} = 1000 \text{ cd/m}^2$

application
range

$m_{u90_4} = -0,000, f_{90}=0, f_4=0$

$m_u = -0,688$

0,1

1

10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

$Y_u = 18 \ 100$

$Y_u = 39$

0,988

0,749

0,455

log Y